

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Masatomo Shibata, et al.

Serial No.: Not Yet Assigned Group Art Unit: Not Yet Assigned

Filing Date: Concurrently Herewith Examiner: Unknown

For: POROUS SUBSTRATE AND FABRICATION METHOD THEREFOR,  
AND GaN SERIES SEMICONDUCTOR LAYERED SUBSTRATE AND  
FABRICATION METHOD THEREFOR

Honorable Commissioner of Patents  
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

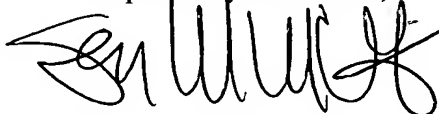
Under the provisions of 37 CFR §1.97 through §1.99 and pursuant to applicant's duty of disclosure under 37 CFR §1.56, applicant respectfully brings the following documents listed on the attached form PTO-1449 and some of which are cited in the International Search Report (Form PCT/ISA/210), to the attention of the Examiner in charge of the above-identified application. Copies of the listed documents are provided herewith for the convenience of the Examiner. Further, in compliance with the concise explanation requirement under 37 CFR §1.98(a)(3) for foreign language documents the relevance of these documents is discussed on pages 2 and 3 of the subject application. Further, for foreign documents English-language Abstract are attached.

This citation does not constitute an admission that the references are relevant or material to the claims. They are only cited as constituting related art of which the applicant is aware.

It is respectfully requested that the listed references be considered by the Examiner and formally made of record in this application.

Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-0481.

Respectfully submitted,



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Date: 12/27/04  
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# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

PHCF-030371

Application Number

10/519152

Applicant(s)

Masatomo Shibata, et al.

Filing Date

Concurrently Herewith

Group Art Unit

Not Yet Assigned

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,656,832	08/12/1997	Ohba et al.			

## U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		EP 1 271 627 A2	01/02/2003	Japan				
		4-12092	01/16/1992	Japan				
		GB 2 344 461 A	06/07/2000	Japan				
		2-81484	03/22/1990	Japan				

## OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

		Chinkyo Kim, et al., "Relaxation of anisotropic domain tilting along vertical growth direction in selectively lateral overgrown GaN by hydride vapor phase epitaxy", Journal of Crystal Growth 208, 2000, pp. 804-808.
		P. Fini, et al., "In situ, real-time measurement of wing tilt during lateral epitaxial overgrowth of GaN", Applied Physics Letters, Volume 76, Number 26, June 26, 2000, pp. 3893-3895

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

PHCF-03037US

Application Number

10/519152

Applicant(s)

Masatomo Shibata, et al.

Filing Date

Concurrently Herewith

Group Art Unit

Not Yet Assigned

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## U.S. PATENT APPLICATION PUBLICATIONS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

## OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

Tsvetanka S. Zheleva, et al., "Pendeo-Epitaxy-A New Approach for Lateral Growth of Gallium Nitride Structure", Department of Material Science and Engineering, 1999.

Masaru Kuramoto, et al, "Room-Temperature Continuous-Wave Operation of InGaN Multi-Quantum-Well Laser Diodes Grown on an n-GaN Substrate with a Backside n-Contact", Japanese Journal Applied Physics, Vol. 38, Part 2, No. 2B, February 15, 1999, pp. L184-L186.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

ATTY DOCKET NO.

PHCF-03037

APPLICATION NO.

10/519152

APPLICANT(S)

Masatomo Shibata, et al.

DTA Rec'd PCT/PTO 27 DEC 2004

FILING DATE

Concurrently Herewith

GROUP ART UNIT

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**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**U.S. PATENT APPLICATION PUBLICATIONS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

			Ok-Hyun Nam, et al., "Lateral Epitaxy of Low Defect Density GaN Layers via Organometallic Vapor Phase Epitaxy", Applied Physics Letters, Volume 71, Number 18, November 3, 1997, pp. 2638-2640

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